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ABSTRACT

A study was conducted to determine the relationship of work orientation, as measured by a 45-statement instrument, to family background and socioeconomic condition, work history of the student, and participation in school-supervised work experience. The study used data collected as part of a longitudinal study of 1,063 high school students in 1989 for 5 schools in 3 locations: a comprehensive high school in a rural county in the South, an inner-city magnet school specializing in automotive trades in a large northeastern city, and three comprehensive suburban high schools adjacent to a major metropolitan area in the upper Midwest. Five work orientation factors were measured by the survey: cynicism about work, responsibility about work, materialistic motivation, job satisfaction, and honest attitude about work. Findings were as follows: (1) female students are less materialistic, more responsible, but less honest in their work than males; (2) work orientation varies more by geographic grouping than within groups at a particular location; (3) children whose parents are economically secure are less concerned with security; (4) authoritarian supervision is associated with cynicism; (5) academic students are more responsible in their work attitudes than general or vocational students; and (6) vocational students are more materialistic and more honest about work. The study suggested that nonschool socioeconomic factors accounted for most of the attitude differences among the students. (10 references) (KC)

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THE RELATIONSHIP OF WORK ORIENTATION TO FAMILY SITUATIONAL AND OTHER VARIABLES

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THE RELATIONSHIP OF WORK ORIENTATION TO FAMILY SITUATIONAL AND OTHER VARIABLES

INTRODUCTION AND PROBLEM

Poor work attitudes by youth entering the labor force, according to employers, is more of a problem than having poor job skills. According to Bracey (1991, p.115) "Eighty percent of employers [American] do express concern about the 'skills' of young workers, but not primarily about the academic skills they bring from school. Instead, they complain that young people lack a work ethic: they don't show up on time or don't show up at all, and they don't work hard when they are present." In a 1989 survey in Michigan (cited in Raizen, 1989), employers gave highest priority to personal management skills(e. g., self-control, honesty and integrity, pride in one's work, and respect for others), second priority to academic skills, and third priority to teamwork skills.

Vocational education in the high schools is designed to prepare students for work in each of the domains of learning, including the affective domain. Changing of attitudes is commonly believed to be more complicated than teaching knowledge and skill. Attitudes such as those about work are believed to be heavily influenced by forces outside the school such as family characteristics, the work ethic of community social groups, and the kind of work experienced by the students.

Super (cited in Kinnane & Pable, 1962, p.320), reported on several studies that indicated that work values are family derived. Socioeconomic status was the primary family factor used in those studies. A family factor called "Materialistic Atmosphere was devised by Kinnane & Pable (1962) as the most important family factor of the five they identified. This factor included emphasis on money, luxuries and economic security in the family.

The work ethic of larger social groups have been studied and reported. Sengoku (1985) studied workers in British, Japanese, and American companies who made similar packing materials. He concluded that workers from the three countries see their relationship to the companies in three different ways. "A Japanese worker will think that the company's loss ends up being his own loss, while the American worker will, in many cases, think that it has nothing to do with him and a British worker will even think in some cases that the company's profit is his loss, for he feels that the company makes profits by exploiting him." (Sengoku, 1985, p. 9.)

Other evidence of cultural differences is an analysis of Eurobarometer Surveys (de Vaus & McAllister, 1991) of adult workers in Europe. Germans were found to be the most intrinsically oriented in their work, while the Belgians, French, Italians, and Spanish are least intrinsically oriented.

Attempts are made by schools, especially in the vocational education programs, to improve all work skills including work habits and attitudes. Factors from outside the school may be more closely related to work orientation than those in school. More information about which factors are most related to attitudes toward work will provide educators, including vocational educators, the knowledge base to approach the problem of improving work attitudes more effectively.

A high percent of high school students do work. High school students in general are working more in recent times. Data from the 1980 High School and Beyond survey revealed that 80% to 90% of high school students had some kind of paid work experience

by the time they graduated (Lewin-Epstein, 1981). Experiences gained through work by high school students can be expected to influence their work attitudes. Some school supervised programs such as cooperative education have been shown to provide higher quality work experience than that provided by jobs not supervised by the school. (Stone, Stern, Hopkins & McMillion, 1990) Further, these jobs have been shown to be related to the career choice of the student, related to classroom instruction, supervised by an adult at work and by the school representative, and to involve more academic skills and responsibility at work. Work attitudes of students in programs where work was supervised by the school were superior to the work attitudes of students whose jobs were not part of a school program.

Greenberger and Steinberg (1986) indicated that the kind of work done by an Orange County, California sample of fast food workers was correlated with, and may cause a range of dysfunctional, unethical, or self-destructive behaviors and attitudes among young high school students. School people believe that work arrangements can be made that will not teach bad behaviors, but will improve work behavior and other behavior.

Purpose of Study

The purpose of this study was to determine the relationship of work orientation, as measured by a 45-statement instrument, to family background and socioeconomic condition, work history of the student, and participation in school supervised work experience.

Data Source

This study used data collected as part of a longitudinal study of high school students by the National Center for Research in Vocational Education (NCRVE). The data used here are from the 1989 baseline data for five schools in three locations. The schools include a comprehensive high school in a very rural county in the Deep South, an inner-city magnet school specializing in automotive trades in a large north eastern city and three comprehensive high schools in a suburban county adjacent to a major metropolitan area in the Upper Midwest which will be referred to as site 4G, 5N and 6M respectively. Of 1,063 students, 180 were at site 4G, 342 were at site 5N and 551 were at site 6M. Boys accounted for 56% of the total group. The percent girls and boys at site 4G was nearly equal, but site 5N was nearly all boys and site 6M was about two-thirds girls. (See Table 1.) These schools were selected, as were six schools in two areas a year earlier, to focus on cooperative education in as many different areas and school types as possible. For statistical purposes, these schools can be considered as a random selection of a purely hypothetical sample of "schools like these." However, a comparison of this NCRVE data (Stern, Stone, Hopkins & McMillion, 1990, p. 270) to an earlier national probability sample in the 1982 Monitoring the Future (MFT) study (Bachman, Johnston, and O'Malley, 1984) showed similarities. A profile of six job characteristics reported by NCRVE seniors is not very different from that described by MFT seniors.

Table 1. Numbers of Students by Site and Gender

Site	Males	Females	Total
4G	83	97	180
5N	330	12	342
6M	182	359	541
Total	595 (56%)	468 (44%)	1063

Instrument

The baseline student questionnaire contained sections on demographic information, school information, work history, present employment, future work aspirations, and an extensive section on attitudes and opinions about work and their orientation towards future work. The instrument drew heavily on questions used in the 1982 Monitoring the Future study (Bachman, Johnston, and O'Malley, 1984) and one reported by Mortimer and Lorence,(1979).

Statistical Procedures

Factor analysis using varimax rotation was used to identify five work orientation components (factors). These five factors comprising the dependent variables were named: 1) cynicism about work, 2) responsibility about work, 3) materialistic motivation, 4) job satisfaction, and 5) honest attitude about work. Cynicism is characterized by "wouldn't work if I could get away with it." Responsibility is characterized by "pride in work and doing a decent job." Materialistic motivation is characterized by "the money is uppermost." Job(work) satisfaction, contrary to the usual use of the term, is characterized by "take it like it is and not push to get ahead." Honesty about work is characterized by "I should earn my pay and not cheat the employer." Analysis of variance was used to study differences of work orientation among groups such as those of geographic location, high school class, track followed at school, kind of school supervised work experience, nature of employer supervision, job variety, and gender. Multiple correlation was used to study the relationship of ten independent variables to the work orientation factors. Factor score means and standard deviations were described for the various independent variables.

Results and Discussion

Descriptive Statistics

After factor scores were generated for the five attitudes described by factor analysis, descriptive statistics were generated for all independent variables on each of the five factors. These are displayed in Tables 2 through Table 7 for variables significantly related to the factors. Mean standardized factor scores and their standardized deviations for each demographic group are used. Interpretation of the factor scores is based on an expected mean of zero and a standard deviation of one. Due to missing values, the total number of responses used to calculate descriptive statistics varied from 651 to 759.

Table 2. Descriptive Statistics for Factor Scores on Gender. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Statis-faction	Honest
Male	360	.051 (.978)	-.134 (1.093)	.357 (1.015)	-.706 (1.048)	.226 (1.296)
Female	388	-.083 (.988)	.111 (.879)	-.363 (.843)	.058 (.953)	-.185 (.613)

If the factors identified in this study are true measures of the proposed constructs, it appears that respondent males are a little more materialistically motivated, a bit more honest and a little less satisfied than females. Females appear to be a little more responsible.

Table 3. Descriptive Statistics for Factor Scores on High School Class. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Satis-faction	Honest
Freshman	3	1.492 (1.073)	0.354 (1.154)	1.625 (1.340)	.847 (.723)	1.718 (1.276)
Sophomore	37	.095 (1.185)	.078 (1.007)	.346 (1.004)	.482 (1.203)	0.53 (1.073)
Juniors	310	.042 (1.032)	-.175 (1.065)	.047 (.971)	.036 (.995)	.101 (1.165)
Seniors	409	-.067 (.921)	.115 (.924)	-.091 (.991)	-0.076 (.959)	-.081 (.842)

Our survey only had three freshmen responses. They were the most cynical about work. The factor score means for all factors start high for freshmen and get lower for seniors. For cynicism, honesty, satisfaction and materialism there are no exceptions for any grade level in this trend. The amount and perhaps kind of experience with a job is felt to be operating here. (The honesty at work question was based on actual behavior at work.)

Table 4. Descriptive Statistics of Factor Scores on Work Variety. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Satis-faction	Honesty
Same way again & again	204	.120 (1.008)	-.058 (.913)	-.234 (.892)	-.043 (.9496)	-.143 (.6971)
Same kind of think in variety ways	123	-.087 (.812)	.158 (.863)	-.297 (.941)	.074 (.9868)	-.117 (.8206)
A number of dif-ferent kinds of things	125	-.054 (.967)	.121 (.890)	-.151 (.899)	-.106 (1.000)	-.122 (.7353)

Respondents reporting repetitive work seemed, more cynical than the ones having more variety. Those doing the same kind of work in a variety of ways were more responsible, less materialistic and more satisfied.

Table 5. Descriptive Statistics of Factors for Work Supervision. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Satis-faction	Honesty
Supervisor Directive	181	.193 (0.981)	-.082 (0.770)	-.214 (0.907)	-.066 (0.919)	-.127 (0.729)
Supervisor Discuss Duties	113	-.199 (0.874)	.267 (1.070)	-.223 (0.984)	.055 (1.122)	-.157 (0.823)
Supervisor half time discuss & half direct	100	-.062 (0.849)	.089 (0.841)	-.305 (0.759)	-.188 (0.863)	-.143 (0.669)

Respondents whose work is entirely supervisor directed reported the most cynicism, least responsibility, and least materialism. Those with supervisory discussion were the least cynical, most responsible, and most satisfied. Those with partial direction and discussion were the least materialistic and the least satisfied.

Table 6. Descriptive Statistics of Factors for High School Program. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Satis-faction	Honesty
General School Program	317	.1032 (.9935)	-.0934 (.9383)	-.1620 (.9533)	-.0298 (.9220)	-.0575 (.8168)
Academic or college prep	215	-.1845 (.9654)	.2707 (.8582)	-.2028 (.9191)	-.0147 (1.023)	-.1647 (.765)
Vocational	211	-.0129 (.9920)	-.1111 (1.104)	.3807 (1.004)	.0988 (1.040)	.2061 (1.320)

General program respondents seemed more cynical and less materialistic than average. Academic students seemed less cynical, more responsible, less materialistic and less honest than average. Vocational students seem less responsible, much more materialistic and more honest than academic or general track students.

Table 7. Descriptive Statistics of Factors for COOP/OJT related to Class or Program. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Satis-faction	Honesty
Have never heard of program	339	-.0082 (1.052)	.0630 (.9637)	-.1158 (.9917)	-.0333 (1.002)	-.0756 (.8812)
Heard of program, did not partici-pate	223	-.0233 (.9501)	-.0665 (1.068)	0.5968 (1.029)	-.0851 (1.066)	.0181 (1.013)
Partici-pated	120	-.0321 (.9186)	.0802 (.8819)	.0480 (.8767)	0.246 (.8933)	-.0365 (.8928)

None of those reporting on the COOP/OJT program relationship to their class work were much different than average on any of the factors except those in the "heard of program category" were quite high on materialistic motivation.

Table 8. Descriptive Statistics of Factors for Work-Study related to Class or Program. (Factor Score Means and Standard Deviations)

Group	N	Cynicism	Respon-sible	Material-istic	Satis-faction	Honesty
Have never heard of program	174	.0722 (1.087)	-.1441 (1.083)	-.1602 (.9998)	-.094 (.9640)	.0645 (1.046)
Heard of program, did not partici-pate	393	-.0921 (.9175)	.1168 (.9158)	.1570 (.9670	.0326 (1.040)	-.1071 (.7836)
Partici-pated	100	.1673 (1.076)	.0162 (1.095)	.0587 (.9047)	-.0087 (.9822)	.0932 (1.208)

Those reporting never having heard of a work-study program seem less responsible in their work attitudes. Those who have heard, but did not participate appear more responsible and materialistic; and those who report participating in work-study seem more cynical about work.

Analyses of Variance

A two-way ANOVA was used to assess group differences for gender and geographic location of schools. Work Orientation was significantly different for boys and girls on responsibility, materialism, and honesty at $p<.01$. Interaction effects were nonsignificant. Geographic differences for cynicism, responsibility, materialism and honesty were significantly different at $p<.001$.

One way ANOVA was used to assess group differences for high school class (Y3); working the same or different job (B14); supervision of work (B20B); job training related to class work (O4A) or work-study (O4B); and type of academic program (O5).

An overall significant difference between classes was supported ($F=3.2307$, $p<.02$). There were no substantive differences in the average attitudes of sophomores, juniors and seniors in the sample. The freshmen ($n=3$) were significantly more cynical, more materialistically motivated; and more satisfied than seniors but the results cannot be extrapolated with such a tiny sample size. (Refer to descriptive statistics in Table 3.)

There were no significant differences in work attitudes for respondents who claimed to be doing the same thing in the same way again and again, those doing the same kind of thing in different ways and those doing different things in different ways (B14) ($F=2.2881$, $p<.10$).

Respondents who reported more authoritarian supervision (B20B) were more cynical than those who reported supervisory discussion ($F=6.7998$, $p<.001$). However, the same respondents reporting more authoritarian supervision felt more responsible about their work ($F=5.4902$, $p<.005$).

Of those students enrolled in general, academic and vocational programs (O5), general curriculum students reported being more cynical on average than the other two groups ($F=5.4632$, $p< .005$). Academic students reported being more responsible than either general or vocational students ($F=11.2784$, $p<.0000$). Vocational students were more materialistically motivated to work than the other curriculum groups ($F=25.8447$, $p<.0000$). Students enrolled in the three curricula did not seem to differ in job satisfaction but they did in honesty with vocational students reporting more honest work attitudes ($F=7.99$, $p<.000$) than either academic or general students.

There were no significant differences in work attitudes among students reporting participation or non-participation in COOP/OJT programs (O4A). Those participating in work-study programs (O4B) were significantly more cynical ($F=3.5618$, $p< .03$); and more responsible ($F=4.2077$, $p< .02$) than non-participants. Non-participants who heard of work-study programs were significantly less materialistically motivated ($F=7.1309$, $p< .0019$) and less honest ($F=3.0835$, $p< .05$).

Correlation Analysis

Correlations were computed for 20 independent variables on each of the five work attitude factors, once for males and once for females, since gender had a significant correlation with the other independent variables in a preliminary analysis.(See Tables 8 and 9.) Based on the observed correlations, a model for the relationship of variables is presented in Figure 1.

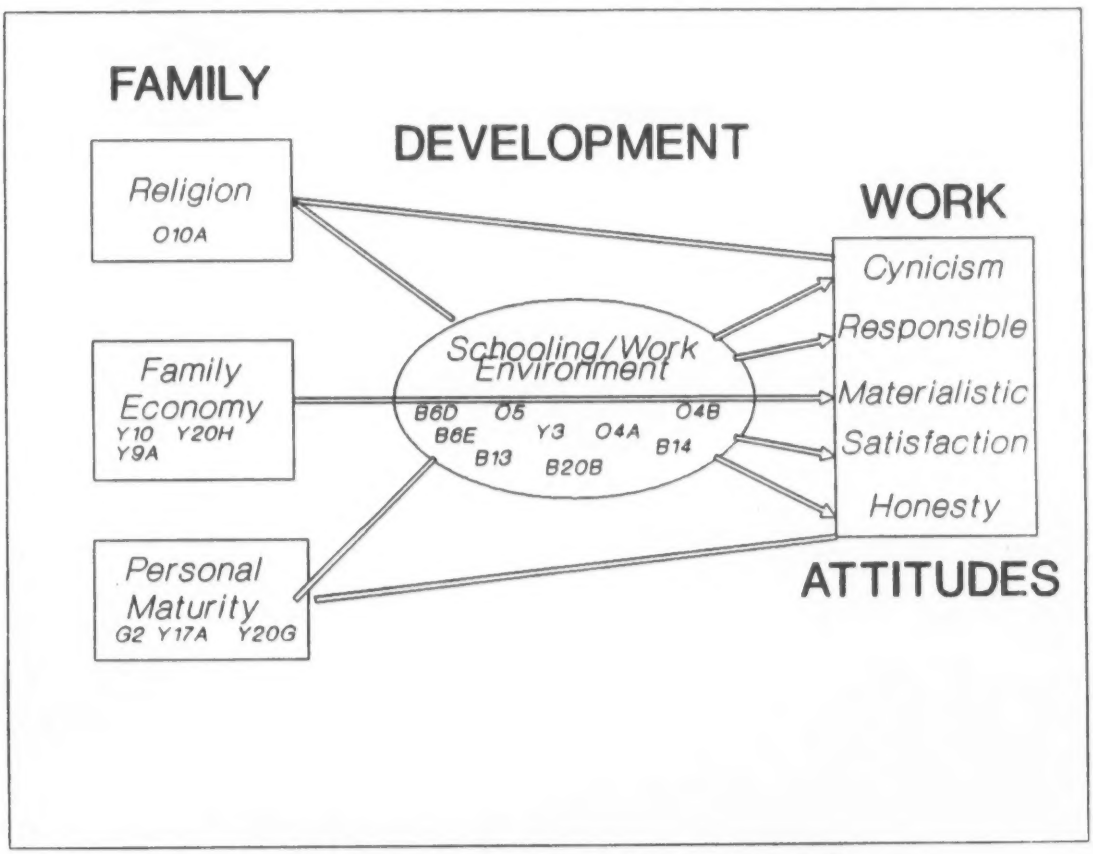

Figure 1. A Model of Work Orientation

Table 9. Correlations between independent and dependent variables for males.

Predictor Variable	Cynicism	Responsibility about work	Materialistic	Satisfaction	Honest
Father educ. level (Y9A)	.016 p<.384	.001 p<.495	-.004 p<.476	-.029 p<.301	**.103** p<.035
Family income (Y10)	.017 p<.379	**-.016** p<.001	.057 p<.147	.032 p<.281	**.112** p<.022
Religion prevent educ (010A)	**.086** p<.057	-.053 p<.169	**.184** p<.000	**.128** p<.009	**.161** p<.002
Use money: help out family (Y20H)	.014 p<.400	.053 p<.160	**-.101** p<.028	-.046 p<.193	**-.085** p<.061
Age first regular job* (NewG2)	.037 p<.265	.066 p<.131	-.008 p<.447	-.032 p<.292	-.026 p<.321
Do chores: clean room (Y17A)	**.086** p<.054	-.012 p<.412	-.039 p<.228	.032 p<.274	.008 p<.444
Use money: investment (Y20G)	.061 p<.125	**-.102** p<.027	-.024 p<.332	-.007 p<.448	.014 p<.397
Why work to acquired skills? (B6E)	.081 p<.165	-.023 p<.393	.105 p<.102	-.043 p<.303	**.116** p<.067
Supervision (B20B)	**-.114** p<.085	.097 p<.121	**.144** p<.040	**.139** p<.047	**-.106** p<.087
Job part of school program or class (B5)	.072 p<.165	-.051 p<.248	**-.137** p<.032	-.091 p<.110	-.071 p<.154

NOTE: Bold means significant correlation at p<.05 or .10 two sided test.

*Age First Regular Job(NewG2). Some respondents claimed to have begun working at age 5, 6, 7, 8, 9, and 10. These responses (about 27 people) were aggregated with the 11 year old category into a variable called NEWG2.

The first independent variable indicates that the higher the educational level of the father, the more honest the student reports being in a work situation. (See Table 9.)

The higher the family income level, the less likely males are to have responsible attitudes towards work, but the more likely they are to be honest in their work habits.

Males respondents who reported that religion might prevent them from getting the kind of education they would like to have are significantly more cynical in their work attitudes and are on the average, more materialistically motivated. Furthermore, they are more likely to be satisfied with their jobs and are more honest in their work habits.

Male respondents who reported using money to help out their family financial situation indicate that they are less likely to be materialistically motivated to do good work and are less honest in their attitudes towards work. Males who do chores at home such as cleaning their room are less cynical in their work attitudes.

Respondents who have money invested are less likely to be responsible in their work attitudes. (This finding is the same as was found for higher family incomes.)

The variable of working for the purposes of acquiring skills shows the male respondents to be more honest in their work habits.

The work supervision variable had significant correlations to four out of five work attitude factors. The more authoritative the work environment the more cynical males are about their work. Direct supervision was associated with less honesty for males. Furthermore, this variable shows that with a more highly authoritative work environment, the respondents are more likely to be materialistically motivated to do good work, and they are more likely to be satisfied with their work than if there was less supervision. (See Table 9 and Table 5.)

When respondents' jobs were part of a school program, attitudes were significantly less materialistically motivated for males.

Table 10. Correlations between independent and dependent variables for females

Predictor Variable	Cynicism	Responsibility about work	Materialistic	Satisfaction	Honest
Father educ. level (Y9A)	-.056 p<.140	.034 p<.225	**-.086** p<.047	-.018 p<.366	.224 p<.328
Family income (Y10)	.028 p<.294	**-.085** p<.051	.033 p<.263	.008 p<.438	.654 p<.101
Religion prevent educ (010A)	.046 p<.179	-.009 p<.427	.006 p<.454	**.123** p<.008	.045 p<.187
Use money: help.out family (Y20H)	-0.021 p<.341	**.087** p<.044	**-.069** p<.088	.012 p<.405	-.007 p<.442
Age first regular job (NewG2)	**.171** p<.001	**-.094** p<.038	.029 p<.294	.042 p<.215	.022 p<.334
Do chores: clean room (Y17A)	.011 p<.417	**.085** p<.048	**.096** p<.029	-.009 p<.493	-.006 p<.449
Use money: investment (Y20G)	-.057 p<.132	-.006 p<.457	-.009 p<.427	.031 p<.276	.026 p<.301
Why work to acquired skills? (B6E)	**.097** p<.066	**-.221** p<.000	**0.122** p<.028	-.003 p<.482	**.156** p<.005
Supervision (B20B)	-.067 p<.150	**.083** p<.098	.051 p<.215	**.099** p<.061	-.055 p<.179
Job part of school program or class (B5)	.066 p<.132	-.038 p<.259	-.008 p<.444	-.014 p<.404	-.059 p<.142

NOTE: Bold means significant correlation at p<.05 or .10 two sided test.

Correlations of female students' relationships of work orientation towards family situational and school intervention variables appear in Table 10. The first independent variable indicates that the higher the educational level of the father, the less likely are the females, but not the males, to be materialistically motivated to do good work.

With regards to the variable of family income, the finding indicates that the higher the family income the less likely are females, as well as the males, to have responsible attitudes towards work.

For those female respondents who reported that religion would prevent them from getting the kind of education they would like to have, the finding suggests that they are more likely to be satisfied with their jobs which is in agreement with the finding concerning males.

Female respondents who reported using money to help out their family financial situation were more likely to have responsible work attitudes (unlike males) about their work and less likely to be materialistically motivated which was in agreement with males.

The age of females when they took on their first regular job has a significant linkage to their being more cynical towards work and much less responsible about their work which is in agreement with the finding concerning males.

For those female respondents who do chores such as cleaning their room, the finding suggests that they are more responsible about work and are far more likely to be materialistically motivated to do good work. These two work attitude factors were not significant for males.

The variable of work to acquire skills shows the female respondents to be more cynical towards work, and less responsible about work; however, it suggests that they are more materialistically motivated to do good work and much more likely to be honest in their attitudes towards work. Males were in agreement with females on the honesty factor. Other factors were not significant.

Directness of supervision and satisfaction were related for both females and males. The more directive the supervision the more responsible were the work attitudes of females. In the correlations of type of supervision with work attitude factors there was a difference in significance but not of direction for all of the factors. Females were less materialistically motivated than males on this and most other independent variables.

Having a job that was part of a school program showed no relationship for females on any work attitude factors and showed a relationship for males on just one factor. Males were less materialistic which is not consistent with what was found about males in general. In regards to the job being part of a school program or class, male respondents in the program indicated that they are less likely to be materialistically motivated.

Findings and Conclusions

Work orientation is multidimensional. Work orientation factors (or dimensions) are: 1) cynicism, 2) responsibility, 3) materialism, 4) satisfaction, and 5) honesty. Cynicism, responsibility and honesty seem especially important in student work orientation.

Male students and female students have different work orientations. Women are less materialistic, more responsible but less honest in their work. The finding of being in it for the money is related to literature about intrinsic and extrinsic rewards which is anything but conclusive (de Vos & McAllister, 1991).

Work orientation varies more by geographic grouping than within groups at a particular location. This could be because of imbalance of boys and girls at two of the locations and because of the vocational difference in subjects studied at each of the schools.

Children whose parents have economic security are less concerned with security. Low materialistic motivation is related to having more educated and high income parents.

Authoritian supervision is associated with cynicism. Supervision with discussion is associated with less cynicism. Authoritian supervision is associated with responsibility.

Work-study students were more cynical and more responsible than nonparticipants.

Academic students are more responsible in their work attitudes than general or vocational students. Vocational students were more materialistically motivated than the others and more honest than the others concerning work place behavior. General students were the most cynical about work.

Whatever it is about high school vocational education that is associated with materialistic motivation and honest attitudes about work are not particularly tied to cooperative education arrangements in the three sites used in the 1989 base line NCRVE study.

Students who are religious enough that it might affect their education are honest in the workplace.

Discussion

The extent to which students choose the vocational track because they already were motivated by desire for money and believed that they should earn their pay is not known. The baseline data studied here did not show that seniors had better work attitudes than juniors or sophomores. Younger students may have slightly better work attitudes. Perhaps older students had attitudes derived from more experience in the workplace which may lend credence to Greenberger and Steinberg (1986) claims. (Most students were juniors and seniors with 37 sophomores and three freshmen.)

Non-school influences are believed to be considerable. The extent to which work ethics are career specific have not been determined in this study. Perhaps work ethics are occupation specific. Is there a bookkeeper ethic, an automotive service ethic or a salesperson ethic? One site in this study had mostly males in an automotive program.

Although school vocational programs are designed to teach work habits and attitudes, the relationship of school factors to work attitudes appear to be minimal when compared to other factors such as influence of the culture and background of people in a geographic area, including gender of students. Socioeconomic and other family factors are related to work orientation. Co-op students were not as different in work orientation from other students as were work study students, suggesting the relationship is due to socioeconomic level more than the kind of program. A difference based on whether students were academic, general or vocational also suggests a socioeconomic basis for the difference.

Other data which are longitudinal in nature have been collected, but not yet analyzed. Analysis of that data will be more helpful in assessing the contribution of school vocational programs to work orientation.

References

Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (1984). Monitoring the future, 1982. Ann Arbor: Survey Research Center, University of Michigan.

Bracey, G. W. (1991). Why can't they be like we were? Kappan, 73(2), 104-117.

de Vaus, D., & McCallister, I. (1991). Gender and work orientation, Work and Occupations, 18(1), 72-93.

Greenberger, E., & Steinberg, L. (1986). When teenagers work: The psychological and social costs of adolescent employment. New York: Basic Books.

Kinnane, J. F., & Pable, M. W. (1962). Family background and work orientation, Journal of Counseling Psychology, 9(4), 320-325.

Lewis-Epstein, N. (1981). Youth employment during high school. Washington, D.C.: National Center for Education Statistics.

Mortimer, J. T., & Lorence, J. (1979). Occupational experience and self-concept: A longitudinal study. Social Psychology Quarterly, 42, 307-323.

Raizen, S. A. (1989). Reforming education for work: A cognitive science perspective, Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

Saengku, T. (1985). Willing workers: the work ethics in Japan, England and the United States. London: Quorum Books, 152 pp.

Stern, D. Stone, J. R. III, Hopkins, C., & McMillion, M. B. (1990). Quality of student's work experience and orientation toward work. Youth and Society, 22(2) 263-282.

APPENDIX A
Factor Analysis of Work Orientation

Final Statistics: Pink 1 & 2 scales

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum
		*				
P1A	.30042	*	1	15.92468	45.5	45.5
P1B	.24768	*	2	3.24539	9.3	54.8
P1C	.36073	*	3	1.36144	3.9	58.7
P1D	.35860	*	4	1.20627	3.4	62.1
P1E	.39718	*				
P1F	.60117	*				
P1G	.42584	*				
P1H	.53464	*				
P1I	.47273	*				
P1J	.46052	*				
P1K	.49019	*				
P1L	.54149	*				
P1M	.69754	*				
P1N	.68214	*				
P1O	.67162	*				
P1P	.68314	*				
P1Q	.64116	*				
P2A	.72887	*				
P2B	.77548	*				
P2C	.74922	*				
P2D	.73418	*				
P2E	.68882	*				
P2F	.68253	*				
P2G	.75006	*				
P2H	.69818	*				
P2I	.71760	*				
P2J	.82354	*				
P2K	.73757	*				
P2L	.77599	*				
P2M	.72691	*				
P2N	.73523	*				
P2O	.75130	*				
P2P	.68178	*				
P2Q	.73508	*				

Initial Statistics: Pink 3 scale

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum
		*				
P3A	1.00000	*	1	8.37645	93.1	93.1
P3B	1.00000	*		.18157	2.0	95.1
P3C	1.00000	*		.12516	1.4	96.5
P3D	1.00000	*		.10673	1.2	97.7
P3E	1.00000	*		.08241	.9	98.6
P3F	1.00000	*		.04942	.5	99.1
P3G	1.00000	*		.03573	.4	99.5
P3H	1.00000	*		.02479	.3	99.8
P3I	1.00000	*		.01774	.2	100.0

APPENDIX B
Work Orientation (dependent variable)
Constructs and Questions

CYNICISM ABOUT WORK
(15 items in order of factor loadings)

"How strongly [much] do you agree or disagree. . .?"

Response options: strongly disagree = 1
disagree = 2
agree = 3
strongly agree = 4

1. I find it hard to stick to anything that takes a long time to do. P1J
2. If I had the chance I'd go through life without ever working. P1O
3. People who take their work home with them probably don't have a very interesting home life. P1L
4. To me, work is nothing more than making a living. P1K
5. Most people today are stuck in dead-end, go-nowhere jobs. P1I
6. I hate to admit it but I give up on my work when things go wrong. P1N
7. Very often I forget work I am supposed to do. P1C
8. Hard work really doesn't get you much of anything in the world. P1H
9. I like the kind of work you can forget about after the day is over. P1B
10. I believe in working only as hard as I have to. P1P
11. There is no such thing as a company that cares about its employees. P1E
12. When a job turns out to be much harder than I was told it would be, I don't feel I have to do it perfectly. P1A
13. If a person can get away with it, he/she should try to work just a little slower than the boss expects him/her to. P2B
14. It's not very practical to try to decide what kind of job you want because your future job depends so much on other people. P1D
15. Workers are entitled to call in sick when they don't feel like working. P1G

RESPONSIBILITY ABOUT WORK CHARACTERISTICS
(10 items in order of factor loadings)

"How strongly [much] do you agree or disagree . . .?"
Response options: strongly disagree = 1
disagree = 2
agree = 3
strongly agree = 4

1. A person should feel a sense of pride in his/her work. P2D
2. A worker should feel some responsibility to do a decent job whether or not his/her supervisor is around. P2A
3. Doing a good job should mean as much to a worker as a good paycheck. P2M
4. If a worker keeps busy on the job, the working day passes more quickly than if he/she were loafing. P2E
5. There is nothing as satisfying as doing the best job possible. P2O
6. Work gives a person a feeling of self-respect. P1M
7. A person should always be thinking about pulling himself/herself up in the world and should work hard with the hope of being promoted to a higher level job. P2N
8. I want to do my best in my job even if this sometimes means working over time. P1F
9. A worker who does a sloppy job ought to feel a little ashamed of himself/herself. P2F
10. I expect my work to be a very central part of my life. P1Q

MATERIALISTIC MOTIVATION
(seven items in order of factor loadings)

"How strongly [much] do you agree or disagree . . .?"
Response options: strongly disagree = 1
disagree = 2
agree = 3
strongly agree = 4

1. A person should choose the job which pays the most. P2P
2. A person should take the job which offers the most overtime if the regular pay on the job is about the same. P2Q
3. A person should choose the job over another mostly because of higher wages. P2R
4. The person who holds down a good job is the most respected person in the neighborhood. P2K
5. Having a good job makes a person worthy of praise from friends and family. P2L
6. My friends would not think much of me if I did not have a good job. P2G
7. The best job that a worker can get is one which permits him/her to do almost nothing during the working day. P2C

JOB SATISFACTION
(mean of non-missing scores on three items)

"How strongly [much] do you agree or disagree . . .?"
Response options: strongly disagree = 1
disagree = 2
agree = 3
strongly agree = 4

1. If people like their jobs, they should be satisfied with them and should not push for a promotion to another job. P2H
2. A worker is better off if he/she is satisfied with a job and is not concerned about being promoted to another job. P2I
3. A promotion to a higher-level job usually means more worries and should be avoided for that reason. P2J

HONEST ATTITUDE AND OPINION ABOUT WORK
(eight items in order of factor loadings)

If you are currently working or have worked in the past, please respond to the following questions. Since you've had a job, how often have you?"

Response options: Never = 1
Seldom = 2
Occasionally = 3
Frequently = 4

1. Taken money from the place you work. P3F
2. Purposely damaged or destroyed property belonging to your employer (including letting something at your job break down so you would not have to work until it was fixed.) P3I
3. Purposely short changed a customer. P3D
4. Lied to your employer about your age or something else in order to get or keep your job. P3E
5. Come to work "high" on drugs or alcohol or used drugs or alcohol at work. P3C
6. Taken things from the place where you work or from other people who work at the same place you do. P3H
7. Put more hours on your time card than you actually worked. P3B
8. Called in "sick" or with a phony excuse when you did not want to go to work. P3A

APPENDIX C
Independent Variables

Religion and Family Economy

1. To what extent do you think your religion will prevent you from getting the kind of education you would like to have? O10A
2. What is the category for the amount of money your family makes in a year? Y10
3. How far in school did your father, step father , or male guardian go? Y9A
4. How do you use your money? I give money to my family. Y20H

Personal Maturity

5. How old were you when you started your first regular job? G2
6. How much responsibility are you given to complete the following household chores? Cleaning your room. Y17A
7. How do you use your money? Savings and investments for other purposes. Y20G

Schooling/Work Environment

8. Why did you want this job? Experience of working. B6D
9. Why did you want this job? Learn new skills. B6E
10. How much of your work time involves dealing with people? B13
11. Which of the following best describes your high school program? General, Academic or college prep, Vocational O5
12. What is your present high school class? Y3
13. When your supervisor wants you to do something, what does he/she do? Tell you, discuss it with you, half and half. B20B
14. Have you ever heard of or participated in any of the following high school educational programs? COOP/OJT O4A
15. Have you ever heard of or participated in any of the following high school educational programs? Work Study Program O4B
16. Does your work involve doing: the same thing in the same way again and again; the same kind of thing in a number of different ways; or a number of different kinds of things? B14